IN THE SPECIFICATION

Please amend the paragraph at page 10, lines 5-21, as follows:

Still another object of the present invention is to provide a plastic optical element producing method for producing a plastic optical element by an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume and at least one transfer surface formed in a cavity surface which defines the cavity, injects a melted resin material into the mold and transfers the transfer surface which forms an optical surface of the plastic optical element by a resin pressure generated within the cavity, and removes the plastic optical element from the mold to be naturally cooled, ~~comprising the step of: (a)~~ including cooling the optical surface of the plastic optical element with priority in a state where a temperature of the plastic optical element is within a predetermined temperature range which is less than or equal to a glass transition temperature of the resin material.

Please amend the paragraph beginning at page 13, line 20, to page 14, line 13, as follows:

A further object of the present invention is to provide a plastic optical element producing apparatus for producing a plastic optical element by an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume and at least one transfer surface formed in a cavity surface which defines the cavity, injects a melted resin material into the mold and transfers the transfer surface which forms an optical surface of the plastic optical element by a resin pressure generated within the cavity, and removes the plastic optical element from the mold to be naturally cooled, ~~comprising~~ including at least one temperature control member contacting at least a portion of a surface of the plastic optical element other than the optical surface to carry out an annealing with respect to the plastic

optical element during a resin cooling process when a temperature of the plastic optical element falls within a predetermined temperature range lower than or equal to a glass transition temperature of the resin material.

Please amend the paragraph beginning at page 15, line 17, to page 16, line 12, as follows:

Another object of the present invention is to provide a plastic optical element producing apparatus for producing a plastic optical element by an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume and at least one transfer surface formed in a cavity surface which defines the cavity, injects a melted resin material into the mold and transfers the transfer surface which forms an optical surface of the plastic optical element by a resin pressure generated within the cavity, and removes the plastic optical element from the mold to be naturally cooled, ~~comprising~~ including at least one temperature control member contacting and cooling the optical surface of the plastic optical element during a resin cooling process when a temperature of the plastic optical element falls within a predetermined temperature range lower than or equal to a glass transition temperature of the resin material. According to the plastic optical element producing apparatus of the present invention, it is possible to greatly reduce the refractive index distribution within the plastic optical element.

Please amend the paragraph at page 18, lines 6-24, as follows:

Still another object of the present invention is to provide a plastic optical element which is produced by an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume and at least one transfer surface formed in a cavity surface which

defines the cavity, injects a melted resin material into the mold and transfers the transfer surface which forms an optical surface of the plastic optical element by a resin pressure generated within the cavity, and removes the plastic optical element from the mold to be naturally cooled, ~~wherein~~ such that the optical surface of the plastic optical element is cooled with priority during a resin cooling process in a state where a temperature of the plastic optical element is within a predetermined temperature range which is less than or equal to a glass transition temperature of the resin material. According to the plastic optical element of the present invention, the refractive index distribution inside is greatly reduced.

Please amend the paragraph beginning at page 18, line 25, to page 19, line 20, as follows:

A further object of the present invention is to provide a plastic optical element which is produced by an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume and at least one transfer surface formed in a cavity surface which defines the cavity, injects a melted resin material into the mold and transfers the transfer surface which forms an optical surface of the plastic optical element by a resin pressure generated within the cavity, and removes the plastic optical element from the mold to be naturally cooled, ~~wherein~~ such that at least a portion of a surface of the plastic optical element other than the optical surface is contacted by at least one temperature control member to carry out an annealing with respect to the plastic optical element during a resin cooling process when a temperature of the plastic optical element falls within a predetermined temperature range lower than or equal to a glass transition temperature of the resin material. According to the plastic optical element of the present invention, the refractive index distribution inside is greatly reduced.

Please amend the paragraph at page 21, lines 3-18, as follows:

FIG. 2 is a perspective view generally showing an embodiment of a plastic optical element according to the present invention. This embodiment of the plastic optical element is produced by a first embodiment of a plastic optical element producing method according to the present invention. In this embodiment, the present invention is applied to a scanning lens. This embodiment is applied to an ~~ejection~~ injection molding which uses a mold having a cavity of a predetermined volume, and at least one transfer surface is formed in a cavity surface which defines the cavity. A melted resin is injected into the mold, and the transfer surface which forms an optical surface of the scanning lens is transferred by a resin pressure generated within the cavity. A molded product, that is, the scanning lens, is removed from the mold, and is naturally cooled (or self-cooled).

Please amend the paragraph beginning at page 27, line 21, to page 28, line 9, as follows:

In FIG. 5, the pair of temperature control members 21 is mounted on a hand part 24 of an automatic tripper which is used for chucking a molded resin product, that is, the scanning lens 1. The automatic tripper is set up next to an ~~ejection~~ injection molding apparatus (not shown) which molds the resin product, that is, the scanning lens 1. The pair of temperature control members 21 mounted on the hand part 24 sandwich the scanning lens 1, so that the side surfaces 12 of the scanning lens 1 contact the corresponding temperature control members 21. Each temperature control member 21 is provided with the cartridge heater 22 and the thermocouple 23 which are connected to and controlled by the external temperature control unit (not shown).

Please amend the paragraph at page 28, lines 13-25, as follows:

First, the ~~ejection~~ injection molding apparatus molds the scanning lens 1 by ~~ejection~~ injection molding, and the molded scanning lens 1 is removed from the mold by the automatic tripper which is provided with the temperature control members 21. The scanning lens 1 is annealed by the temperature control means at a rate of 3°C per minute, until the temperature of the scanning lens 1 (that is, the temperature control means) becomes less than or equal to the lower limit value of the predetermined temperature range. Hence, the optical surfaces 11 of the scanning lens 1 are cooled with priority, similarly to the first embodiment described above.

IN THE ABSTRACT

Please delete the original Abstract on page 49, at lines 1-9, in its entirety and insert therefor the following substitute Abstract on a separate sheet as follows: